



PARTNERSHIPS FOR INNOVATION

Accelerating Innovation Research- Technology Translation

PFI:AIR-TT

(Solicitation: *NSF 13-575*)

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Welcome and Introduction

- Website for this webinar and more information about PFI:AIR-TT program

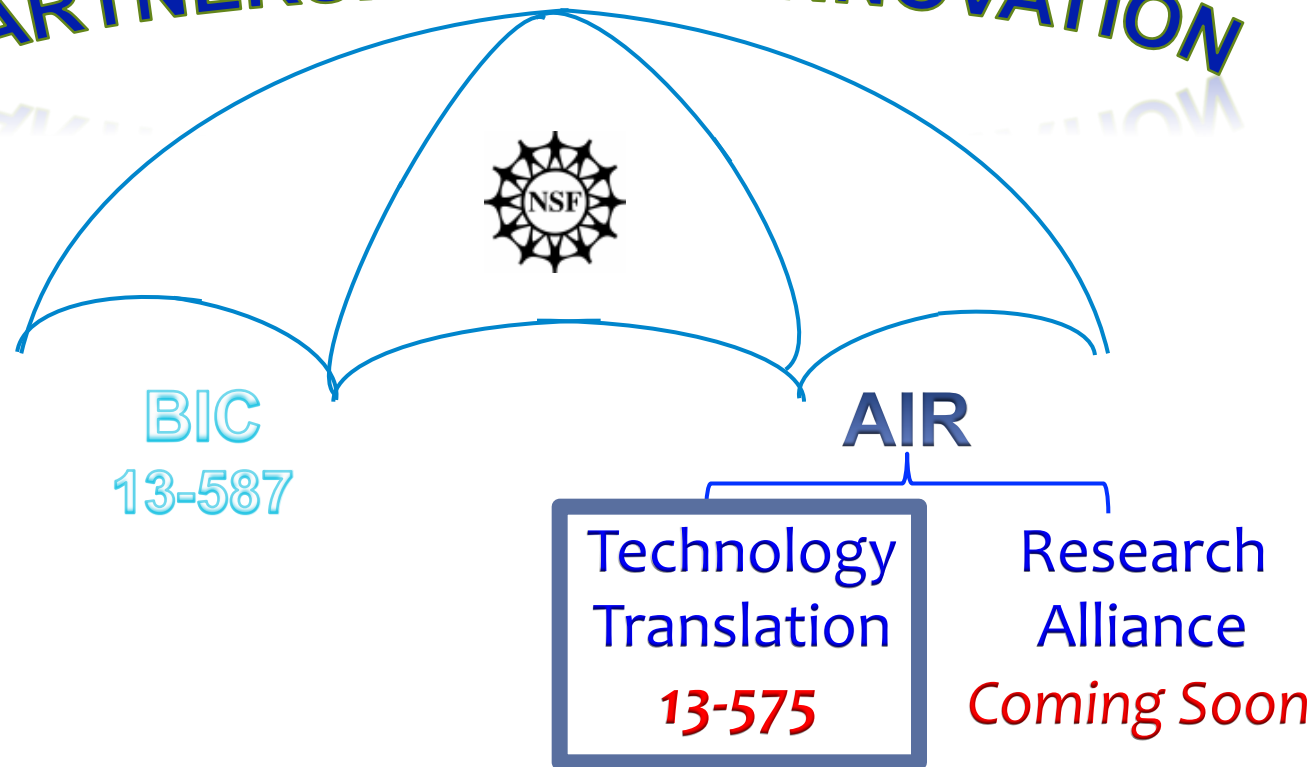
<http://www.nsf.gov/eng/iip/pfi/air-tt.jsp>

- Website for PFI:AIR-TT Solicitation, NSF 13-575:
http://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=504790&ods_key=nsf13575
- Questions? bkenny@nsf.gov



PFI: AIR-TT, PFI:AIR-RA, PFI:BIC

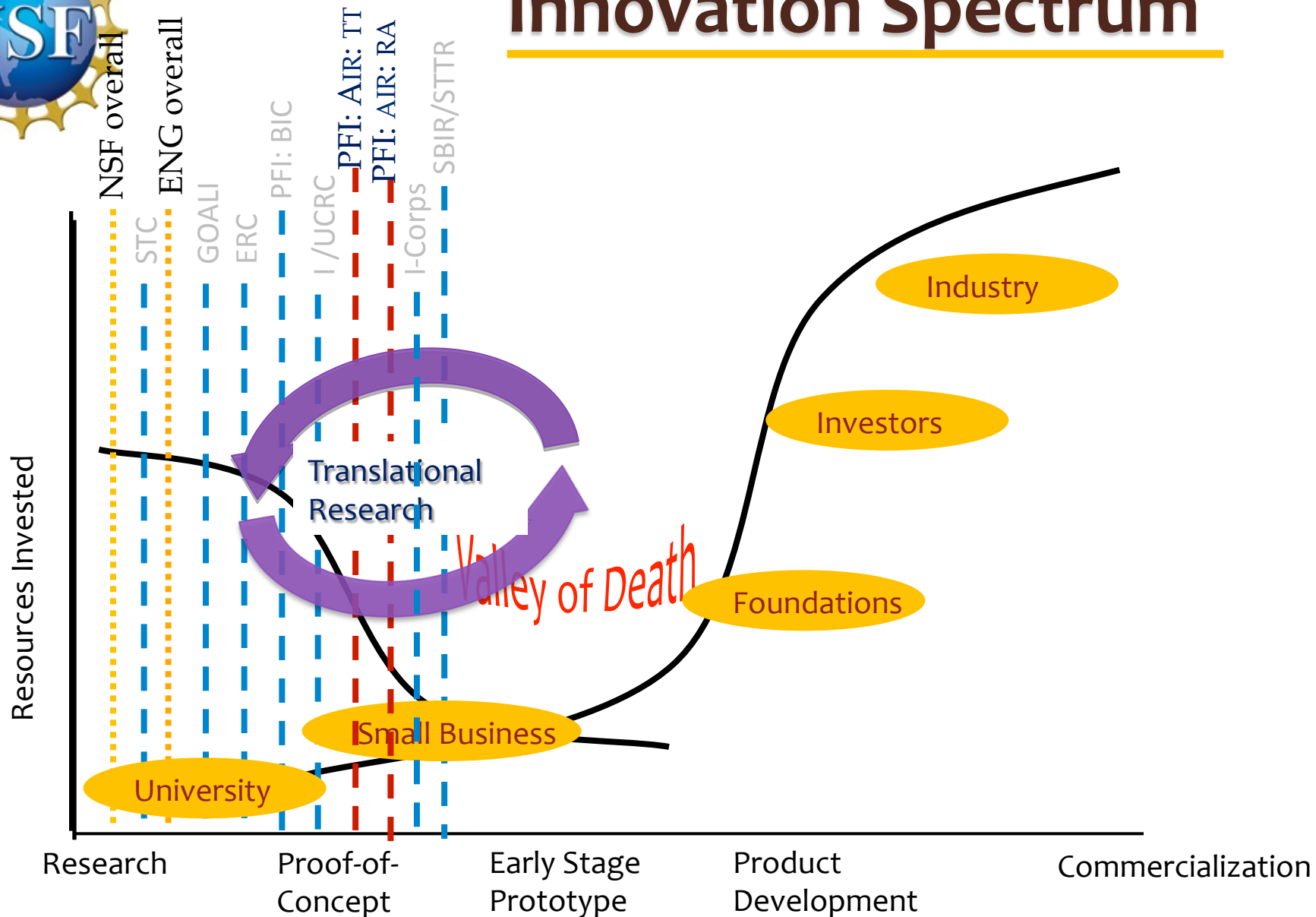
PARTNERSHIPS FOR INNOVATION



**Connecting new scientific discoveries to practical uses
across the innovation spectrum**



Innovation Spectrum





AIR Technology Translation Goals

- Encourage the translation of NSF-funded research discoveries through proof-of-concept, prototype or scale-up along a path toward commercialization.
 - **Proof-of-concept:** realization to ascertain its scientific or technological parameters so that potential application areas can be identified and a working prototype designed
 - **Prototype:** functional demonstration of the proof-of-concept so that identification of performance parameters, design criteria, and functional limitations in an application are well understood
 - **Scale-up** that addresses real-world constraints and potential market-valued solutions
- Train/educate students and post-docs to understand innovation and entrepreneurship



Key Facts: **NSF 13-575**

- 2x/year

LOI required	Full proposal
Oct. 7, 2013	Nov 13, 2013
Mar 13, 2014	May 1, 2014

- PI / co-PI requirements:
 - PI must be faculty member at U.S. academic institution
 - At least one co-PI must have explicit business experience
 - Lineage: PI or co-PI must have had an NSF research award that ended no more than 6-years prior *that is the basis for the proposed translational research.*
 - PI may submit only 1 proposal per cycle



Key Facts: *Budget*

- Up to \$200K for up to 18 months
- Up to 50% sub-award to small business is allowable
- Provide clear justification
- Not allowable
 - PFI: AIR-TT does not fund industrial research and development
 - PFI: AIR-TT will not fund a proposal in which proof-of-concept and/or prototype is complete or already exists
 - Proposals requesting funding primarily for commercialization activities will be returned without review
 - PFI: AIR-TT does not fund “basic” research without a use-inspired or technology translation objective and output.
 - “Collaborative proposals” are not allowed



Key Facts: *Project Narrative (1)*

- Description of research discovery to be translated.
 - Discuss the technology gap to be filled and describe the translational research activities and methods
 - Identify the output: proof-of-concept, prototype or scale-up
- NSF Lineage
 - Include the award number of the underlying award and describe how the project work derives from discoveries from the award.
- Preliminary market research study
 - Discuss the market need and identify deficiencies in the existing competitive technologies
 - Show how proposed technology fills need and would be competitively superior to existing solutions.
- Role of co-PI with business experience



Key Facts: *Project Narrative (2)*

- Strategy toward commercialization.
 - Describe planned path toward commercialization that continues beyond award duration
- Preliminary patent search.
 - Discuss the relevant intellectual property (IP)
 - Discuss feasibility of obtaining needed licenses and/or sufficient protection for the IP developed
- Enhance project participants' knowledge of innovation
 - Discuss opportunities for students/post-docs to gain innovation and entrepreneurial understanding beyond usual research experiences.
- Role of small business partner (if applicable)



Key Facts: *Supplemental Documents*

- Milestone Chart with specific tasks and deliverables
- Letters of commitment (if applicable).
- Letters of support (if applicable, maximum of 3)
- Letter of Cooperative Research Agreement (if applicable)
- Data Management Plan
- Postdoc Mentoring Plan
- Letters regarding use of human subjects, animal subjects, etc (if applicable)



Key Facts: *Additional Review Criteria*

- Merit of the research plan to translate existing research discovery to proof-of-concept, prototype, or scale-up
- Strength of the discussion of the technology gap(s) to be filled and how the proposed technology has the potential to fill that gap
- Strength and evidence of the lineage to NSF award
- Quality of the
 - Preliminary market research study to show market need
 - Strategy for a path toward commercialization
 - Preliminary patent search and accompanying IP discussion
 - Plan for involvement of students/post-docs to increase their knowledge of innovation
- Reasonableness of budget and budget justification



Key Facts: *Post Award*

- Annual Report and Final Report, submitted to Research.gov
- Technology Demonstration Plan
 - Applies to prototype and scale-up awards
 - Due to PD by 12 months from award date
 - Strategy to transition and transfer prototype or scale-up to commercial reality.
 - Technology translation status
 - Market, commercial feasibility, path to commercialization
- Potential Technology Showcase opportunity
 - Applies to prototype and scale-up awards
 - 15-18 months after award
 - NSF-organized venue



Tips-1

- Reviewers are predominantly business people with advanced (Ph.D.) technical degrees
- Types of questions they ask:
 - How well does the proposer understand the intended market and the research issues to be addressed for the technology to be successful in that market space?
 - Does the proposer have the necessary intellectual property protection in place or a plan to obtain that protection?
 - Does the proposer have an initial, viable strategy to move from proof-of-concept or prototype or scale-up toward commercialization?



Tips-2

- Conflict of Interest
 - If PI or co-PI or senior personnel has a COI with any business partner or collaborator on the proposal, there must be a COI management plan on file at the university. PI should provide a letter from university sponsored research office that COI management plan is in place.



Thank you for your interest in PFI:AIR-Technology Translation NSF 13-575.

Copy of the webinar can be found at

<http://www.nsf.gov/eng/iip/pfi/air-tt.jsp>

Additional questions, please contact Barbara Kenny bkenny@nsf.gov

QUESTIONS?